

In the Claims:

Claim 1. (originally presented) A method of treating scleroderma in a mammal with that disease comprising administering to the mammal a physiologically effective amount of an inhibitor of PDE2 wherein said inhibitor does not substantially inhibit COX I or COX II.

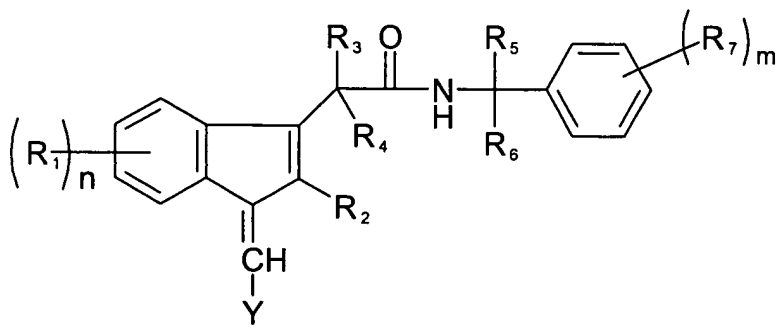
Claim 2. (originally presented) The method of claim 1 wherein mammal is also administered an inhibitor of PDE5.

Claim 3. (originally presented) The method of claim 2 wherein said inhibitor of PDE2 and PDE5 comprise the same compound.

Claim 4. (originally presented) The method of claim 1 wherein said inhibitor is administered without an NSAID.

Claim 5. (originally presented) The method of claim 1 wherein said inhibitor has an IC_{50} for PDE2 of no more than about 25 μM , and has an IC_{50} for each of the COX enzymes greater than about 40 μM .

Claim 6. (cancelled) A method of treating scleroderma in a mammal comprising administering to the mammal a compound of the formula:



wherein R_1 is independently selected in each instance from the group consisting of hydrogen, halogen, lower alkyl, loweralkoxy, amino, loweralkylamino, di-loweralkylamino, loweralkylmercapto, loweralkyl sulfonyl, cyano, carboxamide,

carboxylic acid, mercapto, sulfonic acid, xanthate and hydroxy;

R₂ is selected from the group consisting of hydrogen and lower alkyl;

R₃ is selected from the group consisting of hydrogen, halogen, amino, hydroxy, lower alkyl amino, and di-loweralkylamino;

R₄ is hydrogen, or R₃ and R₄ together are oxygen;

R₅ and R₆ are independently selected from the group consisting of hydrogen, lower alkyl, hydroxy-substituted lower alkyl, amino lower alkyl, lower alkylamino-lower alkyl, lower alkyl amino di-lower alkyl, lower alkyl nitrile, -CO₂H, -C(O)NH₂, and a C₂ to C₆ amino acid;

R₇ is independently selected in each instance from the group consisting of hydrogen, amino lower alkyl, lower alkoxy, lower alkyl, hydroxy, amino, lower alkyl amino, di-lower alkyl amino, amino lower alkyl, halogen, -CO₂H, -SO₃H, -SO₂NH₂, and -SO₂(lower alkyl);

m and n are integers from 0 to 3 independently selected from one another;

Y is selected from the group consisting of quinolinyl, isoquinolinyl, pyridinyl, pyrimidinyl, pyrazinyl, imidazolyl, indolyl, benzimidazolyl, triazinyl, tetrazolyl, thiophenyl, furanyl, thiazolyl, pyrazolyl, or pyrrolyl, or substituted variants thereof wherein the substituents are one or two selected from the group consisting of halogen, lower alkyl, lower alkoxy, amino, lower alkylamino, di-lower alkylamino, hydroxy, -SO₂(lower alkyl) and -SO₂NH₂; and

pharmaceutically acceptable salts thereof.

Claim 7. (cancelled) The method of claim 6 wherein Y is selected from pyridinyl or quinolonyl.

Claim 8. (cancelled) The method of claim 6 wherein R₁ is selected from the group consisting of halogen, lower alkoxy, amino, hydroxy, lower alkylamino and di-loweralkylamino.

Claim 9. (cancelled) The method of claim 8 wherein R₁ is selected from the group consisting of halogen lower alkoxy, amino and hydroxy.

Claim 10. (cancelled) The method of claim 6 wherein R_2 is lower alkyl.

Claim 11. (cancelled) The method of claim 9 wherein R_2 is lower alkyl.

Claim 12. (cancelled) The method of claim 6 wherein R_3 is selected from the group consisting of hydrogen, halogen, hydroxy, amino, lower alkylamino and di-loweralkylamino.

Claim 13. (cancelled) The method of claim 9 wherein R_3 is selected from the group consisting of hydrogen, halogen, hydroxy, amino, lower alkylamino and di-loweralkylamino.

Claim 14. (cancelled) The method of claim 13 wherein R_3 is selected from the group consisting of hydrogen, hydroxy and lower alkylamino.

Claim 15. (cancelled) The method of claim 13 wherein R_3 is selected from the group consisting of hydrogen, hydroxy and lower alkylamino.

Claim 16. (cancelled) The method of claim 6 wherein R_5 and R_6 are independently selected from the group consisting of hydrogen, hydroxy-substituted lower alkyl, amino lower alkyl, lower alkylamino-lower alkyl, lower alkyl amino di-lower alkyl, $-\text{CO}_2\text{H}$, $-\text{C}(\text{O})\text{NH}_2$.

Claim 17. (cancelled) The method of claim 15 wherein R_5 and R_6 are independently selected from the group consisting of hydrogen, hydroxy-substituted lower alkyl, amino lower alkyl, lower alkylamino-lower alkyl, lower alkyl amino di-lower alkyl, $-\text{CO}_2\text{H}$, $-\text{C}(\text{O})\text{NH}_2$.

Claim 18. (cancelled) The method of claim 6 wherein R_5 and R_6 are independently selected from the group consisting of hydrogen, hydroxy-substituted lower

alkyl, lower alkyl amino di-lower alkyl, $-\text{CO}_2\text{H}$, $-\text{C}(\text{O})\text{NH}_2$.

Claim 19. (cancelled) The method of claim 17 wherein R_5 and R_6 are independently selected from the group consisting of hydrogen, hydroxy-substituted lower alkyl, lower alkyl amino di-lower alkyl, $-\text{CO}_2\text{H}$, $-\text{C}(\text{O})\text{NH}_2$.

Claim 20. (cancelled) The method of claim 6 wherein R_7 is independently selected in each instance from the group consisting of hydrogen, lower alkoxy, hydroxy, amino, lower alkyl amino, di-lower alkyl amino, halogen, $-\text{CO}_2\text{H}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{NH}_2$, amino lower alkyl, and $-\text{SO}_2(\text{lower alkyl})$.

Claim 21. (cancelled) The method of claim 19 wherein R_7 is independently selected in each instance from the group consisting of hydrogen, lower alkoxy, hydroxy, amino, lower alkyl amino, di-lower alkyl amino, halogen, $-\text{CO}_2\text{H}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{NH}_2$, amino lower alkyl, and $-\text{SO}_2(\text{lower alkyl})$.

Claim 22. (cancelled) The method of claim 6 wherein R_7 is independently selected in each instance from the group consisting of hydrogen, lower alkoxy, hydroxy, amino, halogen, $-\text{CO}_2\text{H}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{NH}_2$, amino lower alkyl, and $-\text{SO}_2(\text{lower alkyl})$.

Claim 23. (cancelled) The method of claim 18 wherein R_7 is independently selected in each instance from the group consisting of hydrogen, lower alkoxy, hydroxy, amino, halogen, $-\text{CO}_2\text{H}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{NH}_2$, amino lower alkyl, and $-\text{SO}_2(\text{lower alkyl})$.

Claim 24. (cancelled) The method of claim 22 wherein at least one of the R_7 substituents is ortho- or para-located.

Claim 25. (cancelled) The method of claim 23 wherein at least one of the R_7 substituents is ortho- or para-located.

Claim 26. (cancelled) The method of claim 24 wherein at least one of the R_7

substituents is ortho-located.

Claim 27. (cancelled) The method of claim 25 wherein at least one of the R7 substituents is ortho-located.

Claim 28. (cancelled) The method of claim 6 wherein Y is selected from the group consisting of quinolinyl, isoquinolinyl, pyridinyl, pyrimidinyl and pyrazinyl or said substituted variants thereof.

Claim 29. (cancelled) The method of claim 6 wherein said compound comprises (Z)-5-fluoro-2-methyl-(4-pyridylidene)-3-(N-benzyl)indenylacetamide hydrochloride.

Claim 30. (cancelled) The method of claim 6 wherein said compound comprises (Z)-5-fluoro-2-methyl-(4-pyridylidene)-3-(N-benzyl)indenylacetamide hydrochloride.

Claim 31. (originally presented) A method of inhibiting activated macrophages in a mammal with scleroderma comprising chronically administering to the mammal a physiologically effective amount of an inhibitor of PDE2.

Claim 32. (originally presented) The method of claim 31 wherein mammal is also administered an inhibitor of PDE5.

Claim 33. (originally presented) The method of claim 32 wherein said inhibitor of PDE2 and PDE5 comprise the same compound.

Claim 34. (originally presented) The method of claim 31 wherein said inhibitor does not substantially inhibit COX I or COX II.

Claim 35. (originally presented) The method of claim 33 wherein said inhibitor does not substantially inhibit COX I or COX II.

Claim 36. (originally presented) The method of claim 31 wherein the mammal is a companion pet.

Claim 37. (originally presented) The method of claim 36 wherein the mammal is human.

Claim 38. (originally presented) A method of treating scleroderma in a mammal with that disease comprising inhibiting PDE2 in the diseased tissue without substantially inhibiting COX I or COX II.

Claim 39. (originally presented) A method of treating scleroderma in a mammal with that disease comprising inhibiting PDE2 in the diseased tissue.

Claim 40. (originally presented) A method of inhibiting activated macrophages in a mammal with scleroderma comprising chronically administering to the mammal a physiologically effective amount of an inhibitor of PDE2 having a PDE2 IC_{50} no more than about 25 μM and having a COX IC_{50} greater than about 40 μM .